



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,489	07/25/2001	Akira Morikawa	211787US0	4414
22850	7590	10/03/2003	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			WRIGHT, WILLIAM G	
		ART UNIT	PAPER NUMBER	16
		1754	DATE MAILED: 10/03/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/911,489	MORIKAWA ET AL.
	Examiner	Art Unit
	William G. Wright SR.	1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-57 is/are pending in the application.
 - 4a) Of the above claim(s) 39-47 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-38 and 48-57 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) 1-57 are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit 1754

The restriction requirement of Paper No. 8 dated January 9, 2003 and the election in that requirement of claims 1-38 with the election of species Al, Ce, and Zr with traverse is noted. New product claims 48-57 are also considered as part of Group I. The prosecution on the merits of said claims continues.

Claims 1, 13, 15, 26, 27 and 33 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "distribution" as found in each of the rejected claims in the last and penultimate lines of each claim is considered indefinite. What is the exact nature of the claimed distribution? The specification at paragraph [0047] supports mole percent.

Claims 50, 53, 54, 56 and 57 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The independent claims 1, 26 and 33 each have a claimed agglomerated particle diameter limitation of 20 micrometers or less. The instant claim 50 refers back to claim 1 for the agglomerated particle diameter of 1 micrometer or more, this

Art Unit 1754

limitation exceeds the 20 micrometer or less limitation found in claim 1. The instant claim 53 refers back to claim 26 for the agglomerated particle diameter of 1 micrometer or more, this limitation exceeds the 20 micrometer or less limitation found in claim 26. The instant claim 54 refers back to claim 26 for the agglomerated particle diameter of 1 micrometer or more, this limitation exceeds the 20 micrometer or less limitation found in claim 26. The instant claim 56 refers back to claim 33 for the agglomerated particle diameter of 1 micrometer or more, this limitation exceeds the 20 micrometer or less limitation found in claim 33. The instant claim 57 refers back to claim 33 for the agglomerated particle diameter of 1 micrometer or more, this limitation exceeds the 20 micrometers or less limitation found in claim 33.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit 1754

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103(a).

Claims 1-3 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over EP 1,020,216A1 to Suzuki et al.

Suzuki teaches methyl oxide particles composed of cerium and zirconium at the Summary of the Invention and at the detailed description of the preferred embodiments. Particle size is taught to be for the composite and crystallites in the suggested instant claim range.

The applied reference does not teach the elemental distribution found in the instant claims as to the concentration of the metallic elements on the surface or inner portion of the particle.

Art Unit 1754

The claimed limitation of non-homogeneous distribution is not sufficient to distinguish from the compositions of the reference. The applicants have not shown how their composition differs from the suggestions of the applied reference.

The applied reference teaches the composition of the instant claims at the noted areas and if the applicants wish to describe a known particle in a different way, there must be a showing to establish the differences in the instant particle and the particles of the applied reference. In the lack of such a showing the teachings that suggest the instant claimed invention found in the prior art would make the instant claimed invention obvious.

Claims 1-4 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Suzuki et al. '288 or Suzuki et al. '305.

Suzuki '288 teaches composite oxides of cerium, zirconium and aluminum at column 1 line 65 et seq. and in the claims. Nanometer size particles are taught in claim 1. Suzuki '305 teaches at column 5 line 30 et seq. and in the claims nanosize particles of cerium, zirconium, aluminum and yttrium.

Neither of the applied references teaches the elemental distribution found in the instant claims as to the concentration

Art Unit 1754

of the metallic elements on a surface or inner portion of the particle.

The claimed limitation of the non-homogeneous distribution is not sufficient to distinguish from the compositions of the reference. The applicants have not shown how their composition differs from the suggestions of the applied reference as to particle composition.

The applied references each teach the compositions of the instant claims at the noted areas and if the applicants wish to describe a known particle in a different way, there must be a showing to establish the differences in the instant particles and the particles of the applied references. In the lack of such a showing, the teachings that suggest the instant claimed invention found in the prior art would make the claimed invention obvious.

Claims 1-4 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over EP 0778,071 in view of Berndt et al. '180.

EP '071 teaches the instantly claimed composite at page 2 line 9 et seq. Claims 20 and 23 teach the crystallite diameter of not more than 50 nanometers.

The instantly claimed agglomerated particle size and the elements of titanium and silicon with aluminum are not found in the primary reference.

Art Unit 1754

Berndt teaches the composite particle size in the claims and the elements of aluminum, titanium and silicon at column 4 line 35+ of the supporting reference.

The references each are to the same catalytic utility, and use composite oxide agglomerated particles to form the catalyst of each. The applicants describe a known particle in a different way than the description found in the applied reference. The applicants must prove that the particles of the instant claims are in fact different from the particle of the applied reference. The instantly claimed non-homogeneous distribution has no specific basis for the argued distribution other than to say the distribution is not homogeneous, thus in the lack of a showing that distinguishes the particles, the rejection is maintained. The similar catalyst of each reference and the similar utility and the teaching that the elements found in the supporting reference have good utility in the same area of catalysis provides motivation to use these elements in the instant claims and thus the instant claimed invention is obvious.

Applicants argue that In re Best, 195 USPQ 430 (CCPA 1977) does not apply, because there is no reason to believe that the products claimed are identical or substantially identical as they are not produced by an identical or substantially identical process. The Examiner feels the teachings of the references easily fall within the reasoning of In re Best as the applicants

Art Unit 1754

have not presented claims that would cause the reasoning of In re Best to fail.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William G. Wright, Sr. whose telephone number is (703) 305-7792. The examiner can normally be reached on Monday through Thursday from 6:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on (703) 308-3837. The fax phone number for the organization where this application or proceeding is assigned are (703) 872-9306 for the regular communications and (703) 872-9311 for after final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1495.

WGW
W. G. Wright, Sr.:cdc
September 30, 2003

SJB
STEVEN BOS
PRIMARY EXAMINER
GROUP 1100